

Attorney Docket No.:
LYRN004US0

PATENTS
Customer No. 37,141

REMARKS:

Reconsideration of the Examiner's rejection of claims 1-6 and 19-21 under 35 U.S.C. § 103 as being unpatentable over U.S. 6,560,450 (Rosenberg et al.) is respectfully requested.

As noted in the previous response, Rosenberg et al. discloses a routing strategy (that is, an addressing protocol) useful in a satellite communications system in which a number of ground-based sectors are serviced by a satellite communications network, with each individual satellite in the network forming a network node. The ground-based sectors contain a plurality of cells, and each of the cells contains a plurality of terminals.

Each of the ground-based sectors is provided with an address that incorporates a binary Gray code, and the appropriate routing of a packet of information that arrives at a satellite node within the network and that is addressed to a particular ground-based sector (and more particularly, to a particular terminal contained within a particular cell within a particular ground-based sector) is determined from the Gray code in the packet header. As depicted in FIGs. 7 and 9, a satellite receiving the packet performs a Gray code analysis. If the analysis indicates that the destination of the packet is one of the cells covered by the satellite, then the packet is sent to the satellite downlink. Otherwise, the analysis determines which satellite in the network the packet should be forwarded to.

The Examiner is respectfully reminded that, in order to render a claimed invention obvious, a cited reference must teach or suggest each and every element of the claimed invention. Moreover, it is insufficient for the purposes of establishing a prima facie case of obviousness if the reference merely teaches all of the claimed elements individually, since the reference must teach the claimed

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subject matter as a whole (that is, the reference must teach the elements combined in the manner specifically required by the claims).

In the present case, Rosenberg et al. does not render the inventions of claims 1 and 19 (from which the remaining rejected claims depend) obvious, because it does not teach or suggest the element of "if the element is not in the selected application format: routing the message to a next location; and if the message is in the selected format: routing the message to a selected application processor ... and [then] routing the message to the next location". In particular, Rosenberg et al. does not teach the step of "routing the message to the next location" subsequent to the step of processing the message by the selected application processor.

The Examiner argues that the claimed element of an "application format" is met by the code stored at a satellite node in the system of Rosenberg et al. (see Paragraph 30 of the Office Action). The Examiner also argues, in essence, that the claimed element of an "application processor" is met by the component in the satellite node that performs the Gray code analysis (see Paragraph 3 of the Office Action).

Under the Examiner's analysis, the claimed step of determining whether the message is "in the selected application format" refers to the process whereby the satellite node compares the Gray code of the message to see if it corresponds to a cell covered by the satellite (note that Rosenberg et al. teaches, at Col. 10, lines 33-34, that "The satellite node is where the routing algorithms are implemented."). The Examiner suggests that this function is performed by the "application processor". Hence, under the Examiner's interpretation of Rosenberg et al., if no such correspondence exists, then the message is routed to the next location (that is, the message is routed to the next satellite node).

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The problem with the Examiner's argument arises when a correspondence does exist. In this case, the claim 1 requires "routing the message to a selected application processor" and "processing the message by the selected application processor" (note that claim 19 has similar requirements). However, Rosenberg et al. clearly teaches that, when a correspondence in the codes exists (that is, when the destination of the packet is one of the cells covered by the satellite), then the packet is sent to the satellite downlink, not to another satellite node. Hence, the message is neither routed "to a selected application processor" nor processed "by the selected application processor" as required by the claims.

Moreover, the claims require, in essence, that the message is routed to the next location regardless of whether the message is in the selected application format, since the only effect of the application format is whether the message is processed by the selected application processor. It is clear that the "next location" referred to in the claims is the same in each instance, because the first instance of this element is "routing the message to a next location", and the second instance of this element is "routing the message to the next location" [emphasis added]. Thus, the second recital of this element refers back to the first recital for antecedent basis. By contrast, in the system of Rosenberg et al., the "next location" that the message is sent to necessarily differs depending on the outcome of the Gray code analysis.

In light of the above, it is clear that Rosenberg et al. fails to teach each and every element of the claimed invention. Hence, Rosenberg et al. does not support a prima facie case of obviousness.

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Reconsideration of the Examiner's rejection of claims 7-12, 14 and 16-18 under 35 U.S.C. § 103 as being unpatentable over U.S. 6,560,450 (Rosenberg et al.) in view of U.S. 6,578,147 (Shanklin et al.) is respectfully requested.

The Examiner interprets the "application service devices" of claim 7 as satellite nodes, and the "particular application" as the terminals at the edge of the satellite. See Paragraph 11 of the Office Action. However, Applicants respectfully note that claim 7 also requires

wherein each unprocessed application-specific message is processed with the particular application for which it is configured, whereby a plurality of processed application-specific messages is produced; and

wherein the plurality of application service devices are further configured to send the each processed application-specific message to the fabric".

As noted above, Rosenberg et al. clearly teaches that, when a correspondence in the Gray code of the message and the code of the satellite node exists (that is, when the destination of the packet is one of the cells covered by the satellite), then the packet is sent to the satellite downlink, not to another satellite node. Moreover, once the message is sent to the downlink, it is forwarded to the cell specified in the address. Hence, once the message is processed by the terminals at the edge of the satellite (the "particular application" in the Examiner's interpretation), it is not sent anywhere by the satellite nodes (the "application service devices" in the Examiner's interpretation). Therefore, Rosenberg et al. fails to teach or suggest the second of the two quoted steps of the claimed process. Since Shanklin et al. does not cure this infirmity (and indeed was not cited for this purpose), the proposed combination of Rosenberg et al. and Shanklin et al. fails to support a prima facie case of obviousness.

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Reconsideration of the Examiner's rejection of claim 13 under 35 U.S.C. § 103 as being unpatentable over U.S. 6,560,450 (Rosenberg et al.) in view of Troubleshooting (TB) is respectfully requested.

Claim 13 depends from claim 7. The infirmities of Rosenberg et al. with respect to claim 7 have been noted above. These infirmities are not cured by TB. Hence, claim 13 is patentable over the combination of Rosenberg et al. and TB.

Reconsideration of the Examiner's rejection of claim 15 under 35 U.S.C. § 103 as being unpatentable over U.S. 6,560,450 (Rosenberg et al.) in view of U.S. 6,578,147 (Shanklin) and further in view of Troubleshooting (TB), is respectfully requested.

Claim 15 depends (ultimately) from claim 7. The infirmities of Rosenberg et al. with respect to claim 7 have been noted above. These infirmities are not cured by TB. Hence, claim 15 is patentable over the combination of Rosenberg et al. and TB.

Reconsideration of the Examiner's rejection of claim 22 under 35 U.S.C. § 103 as being unpatentable over U.S. 6,560,450 (Rosenberg et al.) in view of U.S. 6,820,250 (Muthukumar et al.) is respectfully requested.

Claim 22 depends from claim 19. The infirmities of Rosenberg et al. with respect to claim 19 have been noted above. These infirmities are not cured by Muthukumar et al. Hence, claim 22 is patentable over the combination of Rosenberg et al. and Muthukumar et al.

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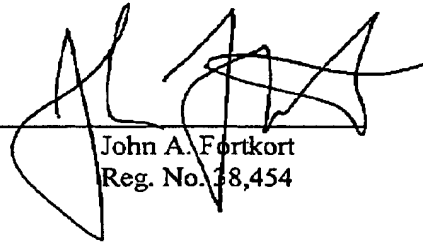
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It is believed that no fees are due with this response. However, if any fees are due, the Commissioner is hereby authorized to charge such fees (or to credit any overpayment) to the deposit account of Fortkort & Houston P.C., Deposit Account No. 50-3694.

Respectfully submitted,

Dated: March 30, 2006

By: _____



John A. Fortkort
Reg. No. 38,454

FORTKORT & HOUSTON P.C.
9442 N. Capital of Texas Hwy.
Arboretum Plaza One, Suite 500
Austin, Texas 78759
(512) 343-4539
(512) 343-4530 (fax)